

Title (en)

A METHOD OF COATING A SOLAR PANEL OR SOLAR CELL WITH FRUSTULES EXTRACTED FROM BENTHIC PENNATE DIATOMS HARVESTED FROM AN INDUSTRIAL BIOFILM PROCESS

Title (de)

VERFAHREN ZUR BESCHICHTUNG EINES SOLARPANELS ODER EINER SOLARZELLE MIT AUS BENTHISCHEN PENNATEN KIESELALGEN AUS EINEM INDUSTRIELLEN BIOFILMVERFAHREN EXTRAHIERTEN FRUSTELN

Title (fr)

PROCÉDÉ DE REVÊTEMENT D'UN PANNEAU SOLAIRE OU D'UNE CELLULE SOLAIRE AVEC DES FRUSTULES EXTRAITS DE DIATOMÉES DE PENNATE BENTHIQUE RÉCOLTÉES D'UN PROCESSUS INDUSTRIEL DE BIOFILM

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Application

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Priority

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Abstract (en)

A method of coating a solar cell and/or solar panel comprising: providing a solar cell and/or solar panel having a first surface at which sunlight is receivable, providing a benthic pennate frustule extraction via: culturing benthic pennate diatoms in an industrial biofilm process, wherein in said industrial biofilm process said benthic pennate diatoms are growing on at least one surface in a water-comprising compartment and wherein said benthic pennate diatoms form a biofilm on said at least one surface; harvesting said benthic pennate diatoms from said at least one surface, said benthic pennate diatoms being in an exponential growth phase; extracting frustules from the harvested benthic pennate diatoms by separating said frustules from organic biomass comprised in said benthic pennate diatoms to form a benthic pennate diatom extraction, providing the benthic pennate frustule extraction to at least the first surface of the solar cell and/or solar panel.

IPC 8 full level

C12N 1/12 (2006.01); **C12P 3/00** (2006.01); **H01G 9/20** (2006.01); **H01L 31/0216** (2014.01); **H01L 51/00** (2006.01); **H01L 51/42** (2006.01)

CPC (source: EP KR US)

C12N 1/12 (2013.01 - EP KR US); **C12P 3/00** (2013.01 - EP KR US); **H01L 31/0216** (2013.01 - KR); **H01L 31/02167** (2013.01 - US); **H01L 31/02168** (2013.01 - EP US); **H10K 30/10** (2023.02 - US); **H10K 85/761** (2023.02 - EP US); **C12N 2500/05** (2013.01 - US); **H01G 9/209** (2013.01 - EP US); **Y02A 40/81** (2017.12 - EP); **Y02E 10/52** (2013.01 - EP); **Y02E 10/549** (2013.01 - EP); **Y02P 60/12** (2015.11 - EP); **Y02P 80/20** (2015.11 - EP)

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JP 7079993 B2 20220603; KR 102468244 B1 20221117; KR 20190015281 A 20190213; PL 3469085 T3 20211227; US 11015166 B2 20210525;
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